

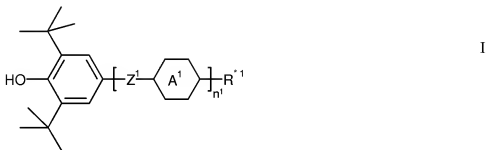
The listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Previously Presented) A compound according to claim 3, which is capable of inducing a cholesteric phase in a nematic liquid crystal and simultaneously acting as a stabiliser.

2. (Previously Presented) A compound according to claim 3, which is capable of acting as a free-radical scavenger.

3. (Currently Amended) A compound of formula I



in which

$R^{*1}$  is a chiral radical,

$Z^1$  is, if present more than once, in each case, independently of one another,  $-CH_2-CH_2-$ ,  $-CH=CH-$ ,  $-C\equiv C-$ ,  $-COO-$ ,  $-OCO-$ ,  $-CH_2O-$ ,  $-OCH_2-$ ,  $-CF_2O-$ ,  $-OCF_2-$ ,  $-(CH_2)_4-$ ,  $-CF=CF-$ ,  $-CH=CF-$ ,  $-CF=CH-$ ,  $-CH_2-$ ,  $-CF_2-$ ,  $-CHF-$ ,  $-O-$ ,  $-S-$  or a single bond,



is, if present more than once, in each case, independently of one another,

- (a) a trans-1,4-cyclohexylene radical, in which one or more non-adjacent  $CH_2$  groups are optionally replaced by  $-O-$  and/or  $-S-$ ,
- (b) a 1,4-cyclohexenylene radical,
- (c) a 1,4-phenylene radical, in which one or two  $CH$  groups are optionally replaced by  $N$ , or
- (d) 1,4-bicyclo[2.2.2]octylene, piperidine-1,4-diyl, naphthalene-2,6-diyl, decahydronaphthalene-2,6-diyl, or 1,2,3,4-tetrahydronaphthalene-2,6-diyl,

where these radicals (a) to (d) and the phenolic benzene ring is optionally mono- or

polysubstituted by F atoms, and

$n^1$  is 1, 2 or 3,

wherein

A)

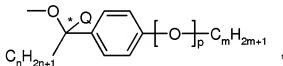
$R^{*1}$  is a chiral radical of the following formula



in which

$K$  is a single bond, alkenylene having 1 to 9 C atoms, alkenylene or alkynylene having 2 to 9 C atoms, wherein one, two or more of the  $-CH_2-$  groups present in the alkenylene, alkenylene or alkynylene are optionally replaced by  $-O-$ ,  $-C=O-$  or  $-S-$ , but where no two O atoms are bonded directly to one another, and the alkenylene, alkenylene or alkynylene are optionally substituted by halogen, or

$R^{*1}$  is

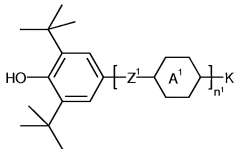


$Q$  is H or halogen,

$n$  and  $m$  are different from one another and, independently of one another, are 1 to 11,

$p$  is 0 or 1, and

$L$ ,  $M$  and  $N$ , each, independently of one another, but differently from one another and from



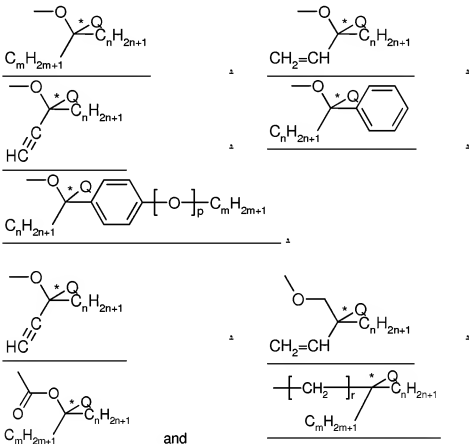
are hydrogen, halogen, aryl or cycloalkyl, alkyl or alkoxy having 1 to 11 C atoms, alkenyl, alkenyloxy, alkynyl or alkynyloxy having 2 to 11 C atoms, where one, two or more of the  $-CH_2-$  groups present in the alkyl, alkoxy, alkenyl, alkenyloxy, alkynyl or alkynyloxy are optionally replaced by  $-O-$ ,  $-C=O-$  or  $-S-$ , but where no two O atoms are bonded directly to one another

and the alkyl, alkoxy, alkenyl, alkenyloxy, alkynyl or alkynyloxy are optionally substituted by halogen;

or

B)

R<sup>\*1</sup> is a chiral radical of one of the following formulae



in which

Q is H or halogen,

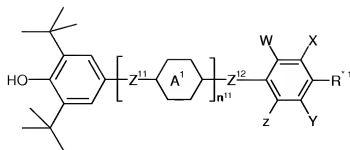
n and m are different from one another and, independently of one another, are 1 to 11,

p is 0 or 1, and

r is 0 to 4.

4. (Currently Amended)

A compound of formula Ia



Ia

in which



is, if present more than once, in each case, independently of one another,

- (a) a trans-1,4-cyclohexylene radical, in which one or more non-adjacent CH<sub>2</sub> groups are optionally replaced by -O- and/or -S-,
- (b) a 1,4-cyclohexenylene radical,
- (c) a 1,4-phenylene radical, in which one or two CH groups are optionally replaced by N, or
- (d) 1,4-bicyclo[2.2.2]octylene,  
piperidine-1,4-diyl, naphthalene-2,6-diyl,  
decahydronaphthalene-2,6-diyl, or  
1,2,3,4-tetrahydronaphthalene-2,6-diyl,

where these radicals (a) to (d) and the phenolic benzene ring is optionally mono- or polysubstituted by F atoms,

$R^{*1}$  is a chiral radical,

$Z^{11}$  and  $Z^{12}$  are, each independently, and in case if  $Z^{11}$  present more than once, in each case, independently of one another, -CH<sub>2</sub>-CH<sub>2</sub>-, -CH=CH-, -C≡C-, -COO-, -OCO-, -CH<sub>2</sub>O-, -OCH<sub>2</sub>-, -CF<sub>2</sub>O-, -OCF<sub>2</sub>-, -(CH<sub>2</sub>)<sub>4</sub>-, -CF=CF-, -CH=CF-, -CF=CH-, -CH<sub>2</sub>-, -CF<sub>2</sub>-, -CHF-, -O-, -S- or a single bond,

$n^{11}$  is 0, 1 or 2,

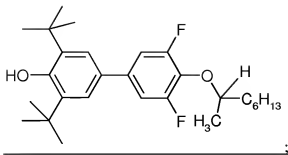
W and Z are each, independently of one another, H, F, Cl, or alkoxy, and

X and Y are each, independently of one another, H, F, Cl, alkyl or alkoxy,

wherein

A)

the compound of formula Ia is



or

B)

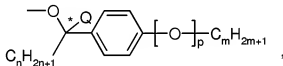
$R^{*1}$  is a chiral radical of the following formula



in which

K is a single bond, alkylene having 1 to 9 C atoms, alkenylene or alkynylene having 2 to 9 C atoms, wherein one, two or more of the  $-CH_2-$  groups present in the alkylene, alkenylene or alkynylene are optionally replaced by  $-O-$ ,  $-C=O-$  or  $-S-$ , but where no two O atoms are bonded directly to one another, and the alkylene, alkenylene or alkynylene are optionally substituted by halogen, or

$R^{*1}$  is

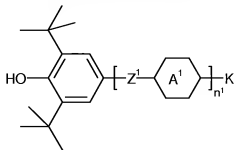


Q is H or halogen,

n and m are different from one another and, independently of one another, are 1 to 11,

p is 0 or 1, and

L, M and N, each, independently of one another, but differently from one another and from



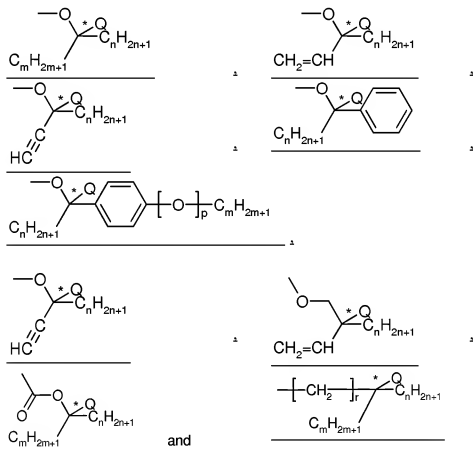
are hydrogen, halogen, aryl or cycloalkyl, alkyl or alkoxy having 1 to 11 C

atoms, alkenyl, alkenyloxy, alkynyl or alkynyloxy having 2 to 11 C atoms, where one, two or more of the -CH<sub>2</sub>- groups present in the alkyl, alkoxy, alkenyl, alkenyloxy, alkynyl or alkynyloxy are optionally replaced by -O-, -C=O- or -S-, but where no two O atoms are bonded directly to one another and the alkyl, alkoxy, alkenyl, alkenyloxy, alkynyl or alkynyloxy are optionally substituted by halogen;

or

C)

R<sup>\*1</sup> is a chiral radical of one of the following formulae



in which

Q is H or halogen,

n and m are different from one another and, independently of one another, are 1 to 11,

p is 0 or 1, and

r is 0 to 4.

5. (Currently Amended) A compound according to claim 3, wherein

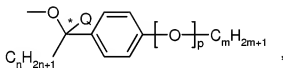
R<sup>\*1</sup> is a chiral radical of the following formula



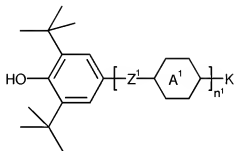
in which

K is a single bond, alkylenylene having 1 to 9 C atoms, alkenylene or alkynylene having 2 to 9 C atoms, wherein one, two or more of the  $-\text{CH}_2-$  groups present in the alkylenylene, alkenylene or alkynylene are optionally replaced by  $-\text{O}-$ ,  $-\text{C}=\text{O}-$  or  $-\text{S}-$ , but where no two O atoms are bonded directly to one another, and the alkylenylene, alkenylene or alkynylene are optionally substituted by halogen, or

$\text{R}^{*1}$  is

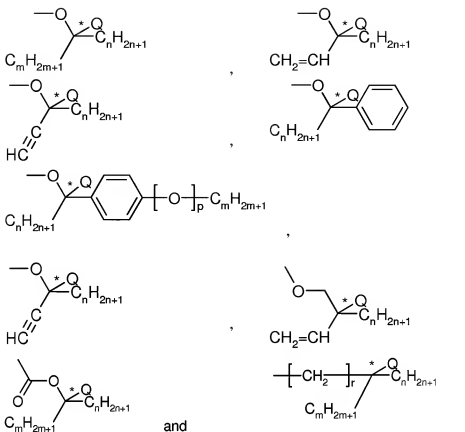


Q is H or halogen,  
 n and m are different from one another and, independently of one another, are 1 to 11,  
 p is 0 or 1, and  
 L, M and N, each, independently of one another, but differently from one another and from



are hydrogen, halogen, aryl or cycloalkyl, alkyl or alkoxy having 1 to 11 C atoms, alkenyl, alkenyloxy, alkynyl or alkynyloxy having 2 to 11 C atoms, where one, two or more of the  $-\text{CH}_2-$  groups present in the alkyl, alkoxy, alkenyl, alkenyloxy, alkynyl or alkynyloxy are optionally replaced by  $-\text{O}-$ ,  $-\text{C}=\text{O}-$  or  $-\text{S}-$ , but where no two O atoms are bonded directly to one another and the alkyl, alkoxy, alkenyl, alkenyloxy, alkynyl or alkynyloxy are optionally substituted by halogen.

6. (Previously Presented) A compound according to claim 3, wherein  $\text{R}^{*1}$  is a chiral radical of one of the following formulae



in which

Q

is H or halogen,

n and m

are different from one another and, independently of one another, are 1 to 11,

p

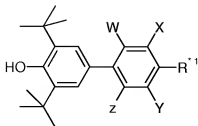
is 0 or 1, and

r

is 0 to 4.

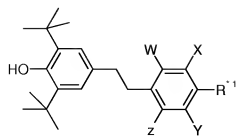
7. (Currently Amended)  
6, Ia-7, Ia-8, or Ia-9

A compound of formula Ia-2, Ia-3, Ia-4, Ia-5, Ia-

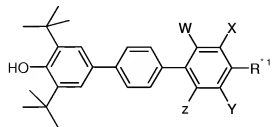


Ia-2

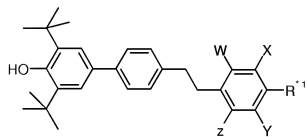




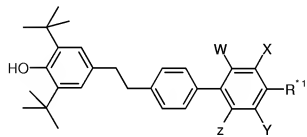
Ia-3



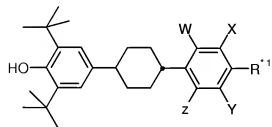
Ia-4



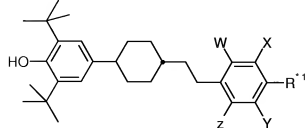
Ia-5



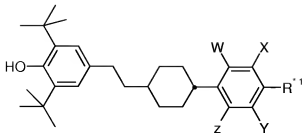
Ia-6



Ia-7



Ia-8



Ia-9

wherein

W, X, Y and Z are each, independently of one another, H, F, Cl, alkyl or alkoxy,

$R^{*1}$  is a chiral radical;

wherein

A)

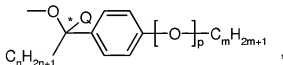
$R^{*1}$  is a chiral radical of the following formula



in which

K is a single bond, alkylene having 1 to 9 C atoms, alkenylene or alkynylene having 2 to 9 C atoms, wherein one, two or more of the  $-CH_2-$  groups present in the alkylene, alkenylene or alkynylene are optionally replaced by  $-O-$ ,  $-C=O-$  or  $-S-$ , but where no two O atoms are bonded directly to one another, and the alkylene, alkenylene or alkynylene are optionally substituted by halogen, or

$R^{*1}$  is

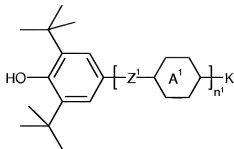


Q is H or halogen,

n and m are different from one another and, independently of one another, are 1 to 11,

p is 0 or 1, and

L, M and N, each, independently of one another, but differently from one another and from

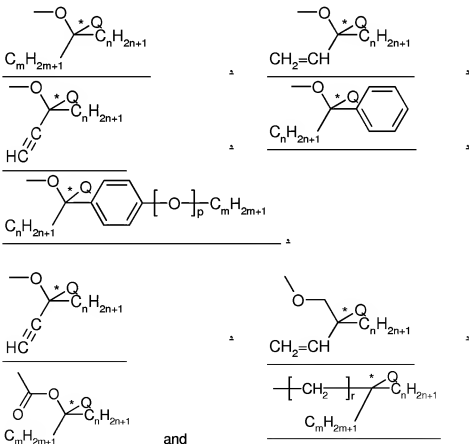


are hydrogen, halogen, aryl or cycloalkyl, alkyl or alkoxy having 1 to 11 C atoms, alkenyl, alkenyloxy, alkynyl or alkynyloxy having 2 to 11 C atoms, where one, two or more of the  $-\text{CH}_2-$  groups present in the alkyl, alkoxy, alkenyl, alkenyloxy, alkynyl or alkynyloxy are optionally replaced by  $-\text{O}-$ ,  $-\text{C}=\text{O}-$  or  $-\text{S}-$ , but where no two O atoms are bonded directly to one another and the alkyl, alkoxy, alkenyl, alkenyloxy, alkynyl or alkynyloxy are optionally substituted by halogen;

or

B)

$\text{R}^{*1}$  is a chiral radical of one of the following formulae



in which

Q \_\_\_\_\_ is H or halogen,  
 n and m \_\_\_\_\_ are different from one another and, independently of one another, are 1 to 11,  
 p \_\_\_\_\_ is 0 or 1, and  
 r \_\_\_\_\_ is 0 to 4.

8. (Withdrawn) A method of providing a chiral dopant, or a stabiliser, or a chiral dopant and simultaneously a stabiliser to a liquid crystal mixture, comprising adding a compounds according to claim 3 to said liquid crystal mixture.

9. (Previously Presented) A liquid-crystal medium comprising a compound according to Claim 3.

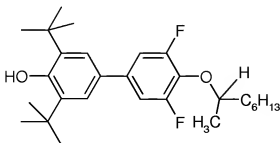
10. (Withdrawn) An electro-optical display comprising a liquid-crystal medium which comprises a compound according to claim 3.

11. (Cancelled)

12. (Withdrawn) A process for preparing a liquid-crystal mixture, comprising mixing together a compound of formula I according to claim 3 with one or more liquid-crystal compounds other than a compound of formula I to form a liquid-crystal mixture.

13. (Cancelled)

14. (Previously Presented) A compound according to claim 4, which is



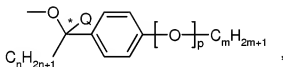
15. (Currently Amended) A compound according to claim 4, wherein  
 $R^{*1}$  is a chiral radical of the following formula



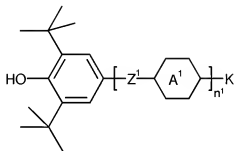
in which

K is a single bond, alkylenylene having 1 to 9 C atoms, alkenylene or alkynylene having 2 to 9 C atoms, wherein one, two or more of the  $-\text{CH}_2-$  groups present in the alkylenylene, alkenylene or alkynylene are optionally replaced by  $-\text{O}-$ ,  $-\text{C}=\text{O}-$  or  $-\text{S}-$ , but where no two O atoms are bonded directly to one another, and the alkylenylene, alkenylene or alkynylene are optionally substituted by halogen, or

$\text{R}^{*1}$  is



Q is H or halogen,  
 n and m are different from one another and, independently of one another, are 1 to 11,  
 p is 0 or 1, and  
 L, M and N, each, independently of one another, but differently from one another and from



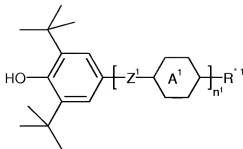
are hydrogen, halogen, aryl or cycloalkyl, alkyl or alkoxy having 1 to 11 C atoms, alkenyl, alkenyloxy, alkynyl or alkynyloxy having 2 to 11 C atoms, where one, two or more of the  $-\text{CH}_2-$  groups present in the alkyl, alkoxy, alkenyl, alkenyloxy, alkynyl or alkynyloxy are optionally replaced by  $-\text{O}-$ ,  $-\text{C}=\text{O}-$  or  $-\text{S}-$ , but where no two O atoms are bonded directly to one another and the alkyl, alkoxy, alkenyl, alkenyloxy, alkynyl or alkynyloxy are optionally substituted by halogen.

16. (Previously Presented) A compound according to claim 4, wherein  $\text{R}^{*1}$  is a chiral radical of one of the following formulae



Q is H or halogen,  
n and m are different from one another and, independently of one another, are 1 to 11,  
p is 0 or 1, and  
r is 0 to 4.

- |                            |                                                                                                      |
|----------------------------|------------------------------------------------------------------------------------------------------|
| 17. (Previously Presented) | A compound according to claim 4, wherein W and Z are each, independently of one another, H, F or Cl. |
| 18. (Previously Presented) | A compound according to claim 4, wherein W and Z are both H.                                         |
| 19. (Currently Amended)    | A compound of formula I                                                                              |



I

in which

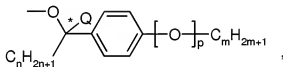
$R^{*1}$  is a chiral radical of the following formula



in which

K is a single bond, alkylene having 1 to 9 C atoms, alkenylene or alkynylene having 2 to 9 C atoms, wherein one, two or more of the  $-CH_2-$  groups present in the alkylene, alkenylene or alkynylene are optionally replaced by  $-O-$ ,  $-C=O-$  or  $-S-$ , but where no two O atoms are bonded directly to one another, and the alkylene, alkenylene or alkynylene are optionally substituted by halogen, or

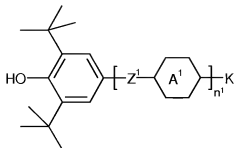
$R^{*1}$  is a group



Q is H or halogen,

n and m are different from one another and, independently of one another, are 1 to 11, p is 0 or 1,

L, M and N, each, independently of one another, but differently from one another and from



are hydrogen, halogen, aryl or cycloalkyl, alkyl or alkoxy having 1 to 11 C

atoms, alkenyl, alkenyloxy, alkynyl or alkynyloxy having 2 to 11C atoms, where one, two or more of the -CH<sub>2</sub>- groups present in the alkyl, alkoxy, alkenyl, alkenyloxy, alkynyl or alkynyloxy are optionally replaced by -O-, -C=O- or -S-, but where no two O atoms are bonded directly to one another and the alkyl, alkoxy, alkenyl, alkenyloxy, alkynyl or alkynyloxy are optionally substituted by halogen,

Z<sup>1</sup> is, if present more than once, in each case, independently of one another, -CH<sub>2</sub>-CH<sub>2</sub>-, -CH=CH-, -C≡C-, -COO-, -OCO-, -CH<sub>2</sub>O-, -OCH<sub>2</sub>-, -CF<sub>2</sub>O-, -OCF<sub>2</sub>-, -(CH<sub>2</sub>)<sub>4</sub>-, -CF=CF-, -CH=CF-, -CF=CH-, -CH<sub>2</sub>-, -CF<sub>2</sub>-, -CHF-, -O-, -S- or a single bond,



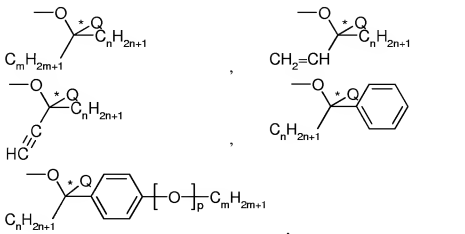
is, if present more than once, in each case, independently of one another,

- a trans-1,4-cyclohexylene radical, in which one or more non-adjacent CH<sub>2</sub> groups are optionally replaced by -O- and/or -S-,
- a 1,4-cyclohexenylene radical,
- a 1,4-phenylene radical, in which one or two CH groups are optionally replaced by N, or
- 1,4-bicyclo[2.2.2]octylene, piperidine-1,4-diyl, naphthalene-2,6-diyl, decahydronaphthalene-2,6-diyl, or 1,2,3,4-tetrahydronaphthalene-2,6-diyl,

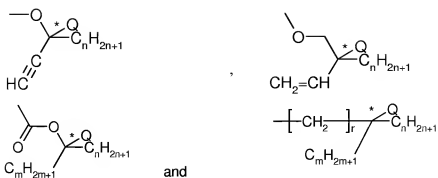
where these radicals (a) to (d) and the phenolic benzene ring is optionally mono- or polysubstituted by F atoms, and

n<sup>1</sup> is 1, 2 or 3.

20. (Previously Presented) A compound according to claim 19, wherein R<sup>\*1</sup> is a chiral radical of one of the following formulae







in which

Q is H or halogen,

n and m are different from one another and, independently of one another, are 1 to 11,

p is 0 or 1, and

r is 0 to 4.

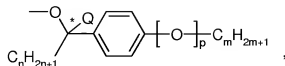
21. (Currently Amended) A compound according to claim 7, wherein  $R^{*1}$  is a chiral radical of the following formula



in which

K is a single bond, alkylene having 1 to 9 C atoms, alkenylene or alkynylene having 2 to 9 C atoms, wherein one, two or more of the  $-CH_2-$  groups present in the alkylene, alkenylene or alkynylene are optionally replaced by  $-O-$ ,  $-C=O-$  or  $-S-$ , but where no two O atoms are bonded directly to one another, and the alkylene, alkenylene or alkynylene are optionally substituted by halogen, or

$R^{*1}$  is

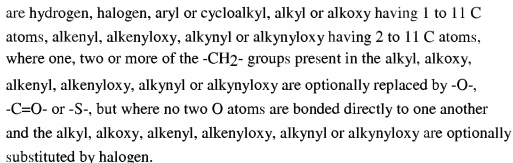


Q is H or halogen,

n and m are different from one another and, independently of one another, are 1 to 11,

p is 0 or 1, and

L, M and N, each, independently of one another, but differently from one another and from



- $\mathbb{R}^{*1}$



Q

is H or halogen,

n and m are different from one another and, independently of one another, are 1 to 11,  
p is 0 or 1, and  
r is 0 to 4.

23. (Cancelled)

24. (Previously Presented) A compound according to claim 5, wherein K is a single bond, -CH<sub>2</sub>-, -O-, -CO-O-, -CO-O-CH<sub>2</sub>-, -O-CO-, -CH<sub>2</sub>-CH<sub>2</sub>-, -CH=CH- or -C≡C-.

25. (Previously Presented) A compound according to claim 15, wherein K is a single bond, -CH<sub>2</sub>-, -O-, -CO-O-, -CO-O-CH<sub>2</sub>-, -O-CO-, -CH<sub>2</sub>-CH<sub>2</sub>-, -CH=CH- or -C≡C-.

26-28. (Cancelled)

29. (Previously Presented) A compound according to claim 5, wherein L, M and N are each, independently of one another, hydrogen, halogen, alkyl or alkoxy having 1 to 11 C atoms, alkenyl, alkenyloxy, alkynyl or alkynyloxy having 2 to 11 C atoms, where one, two or more of the -CH<sub>2</sub>- groups present are optionally replaced by -O-, -C=O- or -S-, but where no two O atoms are bonded directly to one another, and are optionally substituted by halogen.

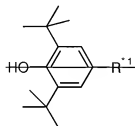
30. (Previously Presented) A compound according to claim 15, wherein L, M and N are each, independently of one another, hydrogen, halogen, alkyl or alkoxy having 1 to 11 C atoms, alkenyl, alkenyloxy, alkynyl or alkynyloxy having 2 to 11 C atoms, where one, two or more of the -CH<sub>2</sub>- groups present are optionally replaced by -O-, -C=O- or -S-, but where no two O atoms are bonded directly to one another, and are optionally substituted by halogen.

31. (Previously Presented) A compound according to claim 29, wherein L, M and N are each, independently of one another, hydrogen, halogen, alkyl or alkoxy having 1 to 11 C atoms, alkenyl, alkenyloxy, alkynyl or alkynyloxy having 2 to 11 C atoms.

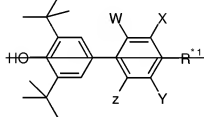
32. (Previously Presented) A compound according to claim 30, wherein L, M and N are each, independently of one another, hydrogen, halogen, alkyl or alkoxy having 1 to 11 C atoms, alkenyl, alkenyloxy, alkynyl or alkynyloxy having 2 to 11 C atoms.

33. (Cancelled)

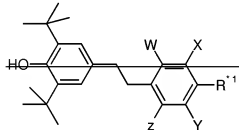
34. (Withdrawn and Currently Amended) A method of providing a chiral dopant, or a stabiliser, or a chiral dopant and simultaneously a stabiliser to a liquid crystal mixture, comprising adding to said liquid crystal mixture a compound according to claim 4 of formula Ia-1, Ia-2, Ia-3, Ia-4, Ia-5, Ia-6, Ia-7, Ia-8, or Ia-9



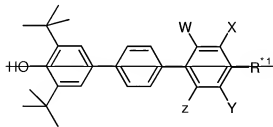
Ia-1



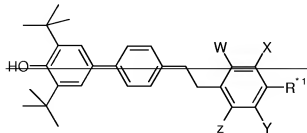
Ia-2



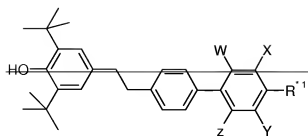
Ia-3



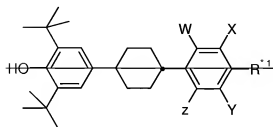
Ia-4



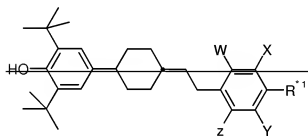
Ia-5



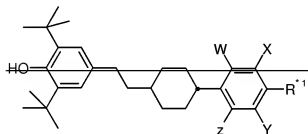
Ia-6



Ia-7



Ia-8



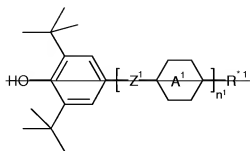
Ia-9

wherein

W, X, Y and Z are each, independently of one another, H, F, Cl, alkyl or alkoxy,

$R^{*1}$  is a chiral radical,

or a compound of formula I



I

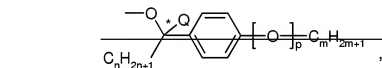
in which

$R^{*+}$  is a chiral radical of the following formula



in which

K is a single bond, alkylene having 1 to 9 C atoms, alkenylene or alkynylene having 2 to 9 C atoms, wherein one, two or more of the  $-CH_2-$  groups present in the alkylene, alkenylene or alkynylene are optionally replaced by  $-O-$ ,  $C=O$  or  $-S-$ , but where no two O atoms are bonded directly to one another, and the alkylene, alkenylene or alkynylene are optionally substituted by halogen, or is a group

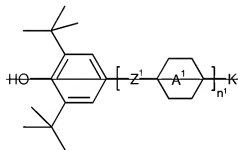


Q is H or halogen;

n and m are different from one another and, independently of one another, are 1 to 11;

p is 0 or 1;

L, M and N, each, independently of one another, but differently from one another and from



are hydrogen, halogen, aryl or cycloalkyl, alkyl or alkoxy having 1 to 11 C atoms, alkenyl, alkenyloxy, alkynyl or alkynyloxy having 2 to 11 C atoms, where one, two or more of the  $-CH_2-$  groups present in the alkyl, alkoxy, alkenyl, alkenyloxy, alkynyl or alkynyloxy are optionally replaced by  $-O-$ ,  $C=O$  or  $-S-$ , but where no two O atoms are bonded directly to one another and the alkyl, alkoxy, alkenyl, alkenyloxy, alkynyl or alkynyloxy are optionally substituted by halogen;

$Z^+$  is, if present more than once, in each case, independently of one another,  $-CH_2-CH_2-$ ,  $-CH=CH-$ ,  $C=C$ ,  $-COO-$ ,  $-OCO-$ ,  $-CH_2O-$ ,  $-OCH_2-$ ,  $-CF_2O-$ ,  $-OCF_2-$ ,  $-(CH_2)_4-$ ,  $-CF=CF-$ ,  $CH=CF-$ ,  $CF=CH-$ ,  $-CH_2-$ ,  $-CF_2-$ ,  $-CHF-$ ,  $-O-$ ,  $-S-$  or a single bond;

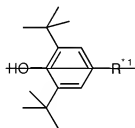


- is, if present more than once, in each case, independently of one another,
- (a) — a trans-1,4-cyclohexylene radical, in which one or more non-adjacent CH<sub>2</sub> groups are optionally replaced by -O- and/or -S-;
  - (b) — a 1,4-cyclohexenylene radical;
  - (c) — a 1,4-phenylene radical, in which one or two -CH- groups are optionally replaced by -N- or
  - (d) — 1,4-bicyclo[2.2.2]octylene, piperidine-1,4-diyl, naphthalene-2,6-diyl, decahydronaphthalene-2,6-diyl, or 1,2,3,4-tetrahydronaphthalene-2,6-diyl;

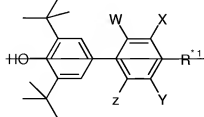
where these radicals (a) to (d) and the phenolic-benzene ring is optionally mono- or polysubstituted by F atoms, and

n<sup>±</sup> is 0, 1, 2 or 3.

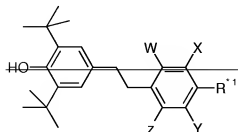
35. (Withdrawn and Currently Amended) An electro-optical display comprising a liquid-crystal medium comprising a compound according to claim 4 of formula Ia-1, Ia-2, Ia-3, Ia-4, Ia-5, Ia-6, Ia-7, Ia-8, or Ia-9



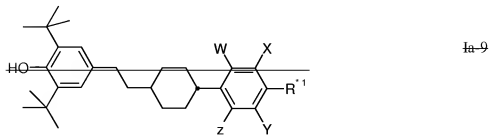
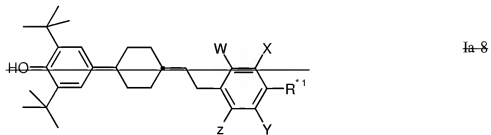
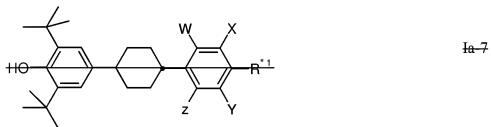
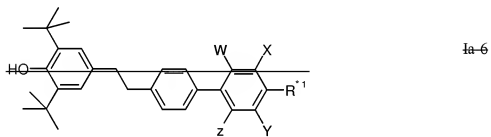
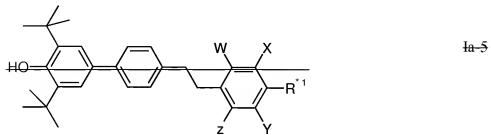
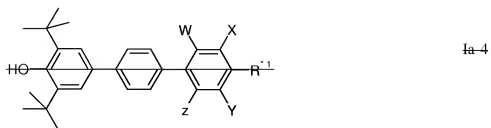
Ia-1



Ia-2



Ia-3



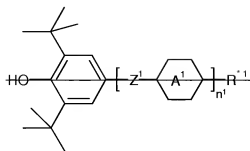
wherein

W, X, Y and Z are each, independently of one another, H, F, Cl, alkyl or alkoxy,

$R^{*1}$  is a chiral radical,



or a compound of formula I



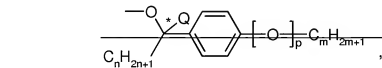
in which

$R^{+1}$  is a chiral radical of the following formula



in which

K is a single bond, alkylene having 1 to 9 C atoms, alkenylene or alkynylene having 2 to 9 C atoms, wherein one, two or more of the  $-CH_2-$  groups present in the alkylene, alkenylene or alkynylene are optionally replaced by  $-O-$ ,  $C=O$  or  $-S-$ , but where no two O atoms are bonded directly to one another, and the alkylene, alkenylene or alkynylene are optionally substituted by halogen, or is a group

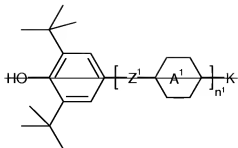


Q is H or halogen;

n and m are different from one another and, independently of one another, are 1 to 11;

p is 0 or 1;

L, M and N, each, independently of one another, but differently from one another and from



are hydrogen, halogen, aryl or cycloalkyl, alkyl or alkoxy having 1 to 11 C atoms, alkenyl, alkenyloxy, alkynyl or alkynyloxy having 2 to 11 C atoms, where one, two or more of the  $\text{CH}_2$  groups present in the alkyl, alkoxy, alkenyl, alkenyloxy, alkynyl or alkynyloxy are optionally replaced by  $\text{O}$ ,  $\text{C}=\text{O}$  or  $\text{S}$ , but where no two  $\text{O}$  atoms are bonded directly to one another and the alkyl, alkoxy, alkenyl, alkenyloxy, alkynyl or alkynyloxy are optionally substituted by halogen;

$\text{Z}^+$  is, if present more than once, in each case, independently of one another,  $\text{CH}_2\text{CH}_2$ ,  $\text{CH}=\text{CH}$ ,  $\text{C}=\text{C}$ ,  $\text{COO}$ ,  $\text{OCO}$ ,  $\text{CH}_2\text{O}$ ,  $\text{OCH}_2$ ,  $\text{CF}_2\text{O}$ ,  $\text{OCF}_2$ ,  $(\text{CH}_2)_4$ ,  $\text{CF}=\text{CF}$ ,  $\text{CH}=\text{CF}$ ,  $\text{CF}=\text{CH}$ ,  $\text{CH}_2$ ,  $\text{CF}_2$ ,  $\text{CHF}$ ,  $\text{O}$ ,  $\text{S}$  or a single bond;



is, if present more than once, in each case, independently of one another;

(a) a trans 1,4 cyclohexylene radical, in which one or more non-adjacent  $\text{CH}_2$  groups are optionally replaced by  $\text{O}$  and/or  $\text{S}$ ;

(b) a 1,4 cyclohexenylene radical;

(c) a 1,4 phenylene radical, in which one or two  $\text{CH}$  groups are optionally replaced by  $\text{N}$ ; or

(d) 1,4 bicyclo[2.2.2]octylene, piperidine 1,4 diyl, naphthalene 2,6 diyl, decahydronaphthalene 2,6 diyl, or 1,2,3,4 tetrahydronaphthalene 2,6 diyl;

where these radicals (a) to (d) and the phenolic benzene ring is optionally mono- or polysubstituted by  $\text{F}$  atoms; and

$n^+$  is 0, 1, 2 or 3.

36-41. (Cancelled)

42. (New) An electro-optical display comprising a liquid-crystal medium which comprises a compound according to claim 7.